# TRANSMITTAL FORM

*(to be used for all correspondence after initial filing)*

| | |
|---|---|
| Application Number | 10/691,474 |
| Filing Date | October 21, 2003 |
| First Named Inventor | Lu, Kun |
| Art Unit | 2613 |
| Examiner Name | SEDIGHIAN, REZA |
| Attorney Docket Number | 021822-000200US |

Total Number of Pages in This Submission

*(Stamp: OIPE, APR 10 2007, PATENT & TRADEMARK OFFICE)*

## ENCLOSURES    *(Check all that apply)*

- [ ] Fee Transmittal Form
  - [ ] Fee Attached
- [ ] Amendment/Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Reply to Missing Parts/ Incomplete Application
  - [ ] Reply to Missing Parts under 37 CFR 1.52 or 1.53

- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
  - [ ] Landscape Table on CD

- [x] After Allowance Communication to TC
- [ ] Appeal Communication to Board of Appeals and Interferences
- [ ] Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
- [ ] Proprietary Information
- [ ] Status Letter
- [x] Other Enclosure(s) (please identify below):
  Return Postcard
  Part B - Fee Transmittal
  Copy Part B - Fee Transmittal
  Communication - Comments on Statement of Reasons for Allowance

| Remarks | The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430. |
|---|---|

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

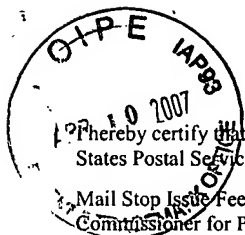| Firm Name | Townsend and Townsend and Crew LLP | | |
|---|---|---|---|
| Signature | *Daniel Mao (signature)* | | |
| Printed name | Daniel Mao | | |
| Date | April 6, 2007 | Reg. No. | 51,995 |

## CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Issue Fee,Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

| Signature | *Eleanor J. Taylor (signature)* | | |
|---|---|---|---|
| Typed or printed name | Eleanor J. Taylor | Date | April 6, 2007 |

61023032 v1

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Kun Lu

Application No.: 10/691,474

Filed: October 21, 2003

For: RING MAP DISCOVERY AND
VALIDATION METHOD AND
SYSTEM FOR OPTICAL NETWORK
APPLICATIONS

Customer No.: 20350

Confirmation No.: 5026

Examiner: SEDIGHIAN, REZA

Art Unit: 2613

COMMUNICATION - COMMENTS ON
STATEMENT OF REASONS FOR
ALLOWANCE

Mail Stop Issue Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Examiner's Statement of Reasons for Allowance, Applicant notes that claim 1 recites:

1.     A method for generating a ring map for optical network applications, the method comprising:

sending a first discovery message to a first node through a portion of an optical network, the first node corresponding to a first node identification and a first predetermined identification, the first discovery message including at least a source node identification associated with a source node, a source predetermined identification associated with the source node, and a first ring connectivity map;

processing at least information associated with the source node identification and the first node identification;

if the source node identification and the first node identification are different, updating the first ring connectivity map;

if the source node identification and the first node identification are identical,

processing at least information associated with the source predetermined identification and the first predetermined identification;

if the source predetermined identification and the first predetermined identification are different, sending a first alarm message indicating multiple assignments of the source node identification.

Applicant also notes that claim 11 recites:

11.    A method for validating a ring map for optical network applications, the method comprising:

sending a first validation message from a source node through at least a portion of an optical network, the source node associated with a first ring map, the first validation message including at least a source node identification associated with the source node and a first ring connectivity map associated with the source node, the first ring map including at least information associated with the source node identification and the first ring connectivity map;

receiving the first validation message at a first node directly from the source node, the first node associated with a second ring map;

processing at least information associated with the source node identification and the second ring map;

if the source node identification is not associated with a predetermined node, sending a first initialization message;

if the source node identification is associated with the predetermined node,

processing at least information associated with the first ring map and the second ring map;

          if the first ring map and the second ring map are inconsistent, sending a first alarm message.

          Applicant also notes that claim 18 recites:

    18.    A method for processing a discovery message for optical network applications, the method comprising:

          sending a first discovery message to a first node through a portion of an optical network, the first node associated with a first node identification and a first predetermined identification, the first discovery message including at least a source node identification associated with a source node, a source predetermined identification associated with the source node, and a first ring connectivity map;

          if the first node includes a second ring map,

               processing at least information associated with the second ring map and the source node identification;

               if the source node identification is absent from the second ring map, sending a first initialization message;

               if the first node is free from the second ring map,

               processing at least information associated with the source node identification and the first node identification;

               if the source node identification and the first node identification are different, updating the first ring connectivity map and sending the first discovery message to a second node;

               if the source node identification and the first node identification are identical,

                    processing at least information associated with the source predetermined identification and the first predetermined identification;

                    if the source predetermined identification and the first predetermined identification are different, sending a first alarm message indicating multiple assignments of the source node identification.

Applicant also notes that claim 22 recites:

22.    A method for processing a validation message for optical network applications, the method comprising:

sending a first validation message from a source node through at least a portion of an optical network, the source node associated with a first ring map, the first validation message including at least a source node identification associated with the source node and a first ring connectivity map associated with the source node, the first ring map including at least information associated with the source node identification and the first ring connectivity map;

receiving the first validation message at a first node directly from the source node;

if the first node includes a second ring map;

processing at least information associated with the source node identification and the second ring map;

if the source node identification is not associated with a predetermined node, sending a first initialization message;

if the source node identification is associated with the predetermined node,

processing at least information associated with the first ring map and the second ring map;

if the first ring map and the second ring map are inconsistent, sending a first alarm message.

Applicant also notes that claim 24 recites:

24.    An apparatus for generating a ring map for optical network applications, the apparatus comprising:

a message receiver configured to receive a first discovery message, the first discovery message including at least a first node identification associated with a first node, a first predetermined identification associated with the first node, and a first ring connectivity map;

a message sender configured to send an alarm message and send a second discovery message, the second discovery message including at least a second node identification

associated with a second node, a second predetermined identification associated with the second node, and a second ring connectivity map;

a memory system configured to store at least information associated with a ring map;

a processing system coupled to the message receiver, the message sender, and the memory system and associated with a third node identification and a third predetermined identification;

wherein the processing system is configured to

process at least information associated with the first node identification and the third node identification;

if the first node identification and the third node identification are different, update the first ring connectivity map;

if the first node identification and the third node identification are identical,

processing at least information associated with the first predetermined identification and the third predetermined identification;

if the first predetermined identification and the third predetermined identification are different, instruct the message sender to send the alarm message indicating multiple assignments of the first node identification.

Applicant also notes that claim 28 recites:

28. An apparatus for validating a ring map for optical network applications, the apparatus comprising:

a message receiver configured to receive a first validation message, the first validation message including at least a first node identification associated with a first node and a first ring connectivity map associated with the first node, the first validation message associated with a first ring map including at least information associated with the first node identification and the first ring connectivity map;

a message sender configured to

send an initialization message;

send an alarm message;

send a second validation message, the second validation message including at least a second node identification associated with a second node and a second ring connectivity map associated with the second node, the second validation message associated with a second ring map including at least information associated with the second node identification and the second ring connectivity map;

a memory system configured to store at least information associated with the second ring map;

a processing system coupled to the message receiver, the message sender, and the memory system and associated with the second node identification and the second predetermined identification;

wherein the processing system is configured to

process at least information associated with the first node identification and the second ring map;

if the first node identification is not associated with a predetermined node, send the initialization message;

if the first node identification is associated with the predetermined node,

process at least information associated with the first ring map and the second ring map;

if the first ring map and the second ring map are inconsistent, instruct the message sender to send the alarm message.

None of the prior art references teach or suggest a method or an apparatus as recited in any of the claims.

Respectfully submitted,

Daniel Mao
Reg. No. 51,995

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: (415) 576-0200
Fax: (415) 576-0300
DM:ejt

61022667 v1